

In the specification:

Please replace paragraph [0025] with the following amended paragraph:

[0025] The particular combination of metal layers and processing steps described in the foregoing embodiment results in the formation of a silver interconnect which may be utilized in a variety of integrated circuit structures. One example of the utilization of the silver interconnect structure and process of the invention is illustrated in FIG. 7. Referring to FIG. 7, after transistor 140 and field isolation regions 132 have been formed, an interlevel dielectric layer 160 is formed overlying transistor 140 and field isolation regions 132. In one embodiment, interlevel dielectric layer 160 comprises dielectric layer 142, etch stop layer 144 and dielectric layer 146.

Please replace paragraph [0028] with the following amended paragraph:

[0028] A portion of dielectric layer 146 and a portion of etch stop layer 144 are then removed to expose a portion of via plugs 152 and form interconnect opening. Interface layer 158 is formed in accordance with the previously described processing steps and directly overlies the exposed portion of via plugs 152. A silver interconnect 154 is then formed in accordance with the previously described processing steps. Via plugs 152 enables a subsequently deposited conductive layer 156 to be electrically coupled to source/drain regions 134 of the transistor 140 through silver interconnect 154 and interface layer 158. It would be appreciated that the foregoing process steps may be repeated in order to fabricate additional levels of conductive interconnects.

Please replace paragraph [0040] with the following amended paragraph:

[0040] During the UV lithography process, a photoresist mask 210 is placed directly on the surface of silver layer 206 without an antireflective coating, as illustrated in FIG. 12. The photoresist mask 210 is then exposed to UV light. As a result, the chemical structure of some of the photoresist mask 210 materials are changed. After a developing process, only a portion of the mask 210 that covers the interconnect is remained. Other lithography process may be employed.

Please replace paragraph [0042] with the following amended paragraph:

[0042] After the interconnect 218 is formed, a protection layer 212 is deposited overlying the silver layer 206 and the interface layer 216, as illustrated in FIG. 16. The protection layer 212 is formed to prevent silver layer 206 from diffusion into other materials, such as dielectric layer 214 of FIG. 18. In one embodiment, protection layer 212 ~~protection layer 214~~ may be a layer of titanium. In an alternative embodiment, protection layer 212 ~~protection layer 214~~ may be a layer of titanium nitride or tantalum nitride. In a further alternative embodiment, the protection layer may be a layer of tungsten. Other materials that prevent silver diffusion may be utilized as a protection layer.